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ENERGY INDUSTRY APPLICATION SHARING

Energy Industry Summary

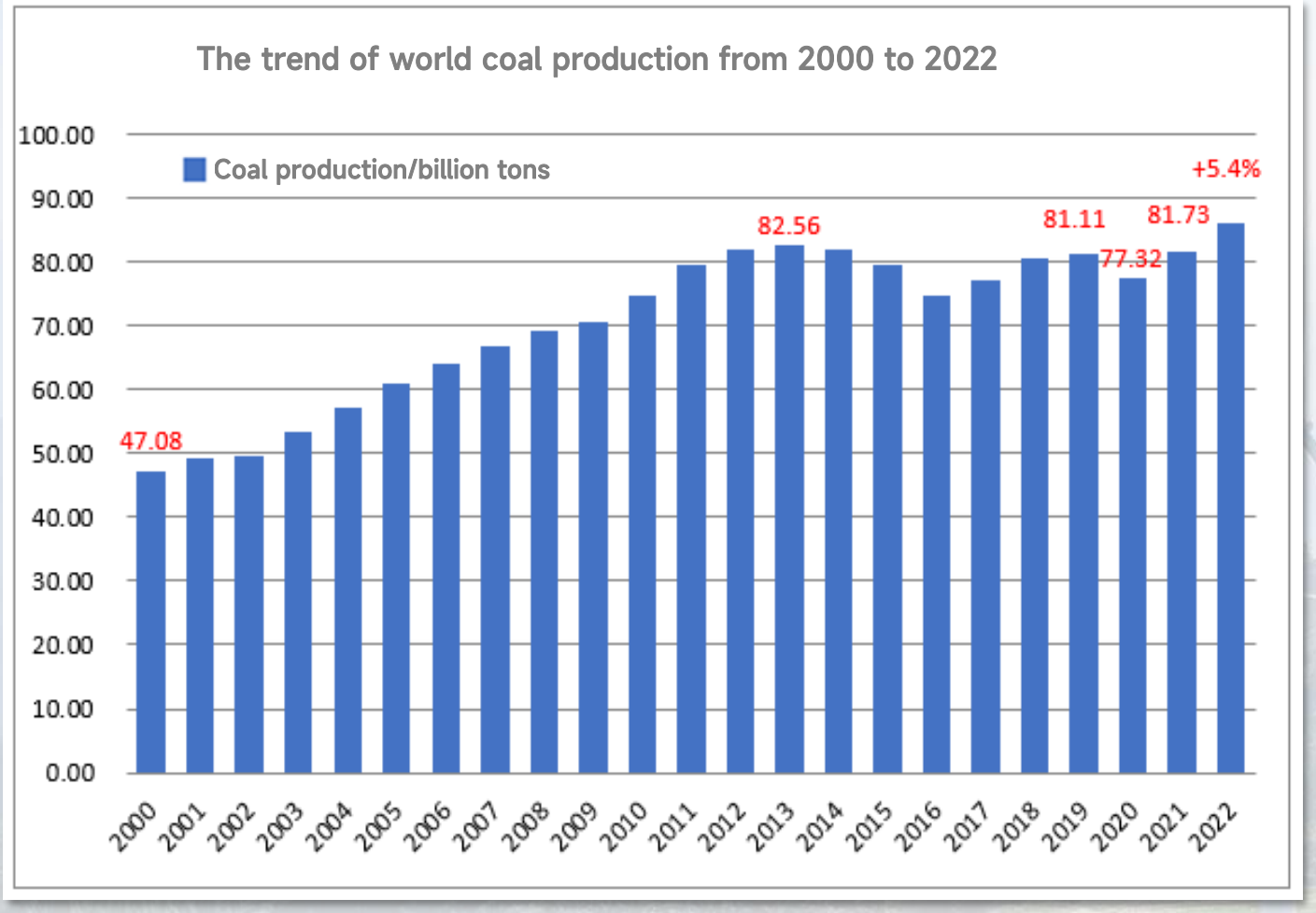
The energy industry, also known as the fuel and power industry, refers to the industrial sector that develops and utilizes various energy resources in nature and converts them into secondary energy.
Conventional energy generally includes coal industry, petroleum industry, and electric power industry.

Coal industry

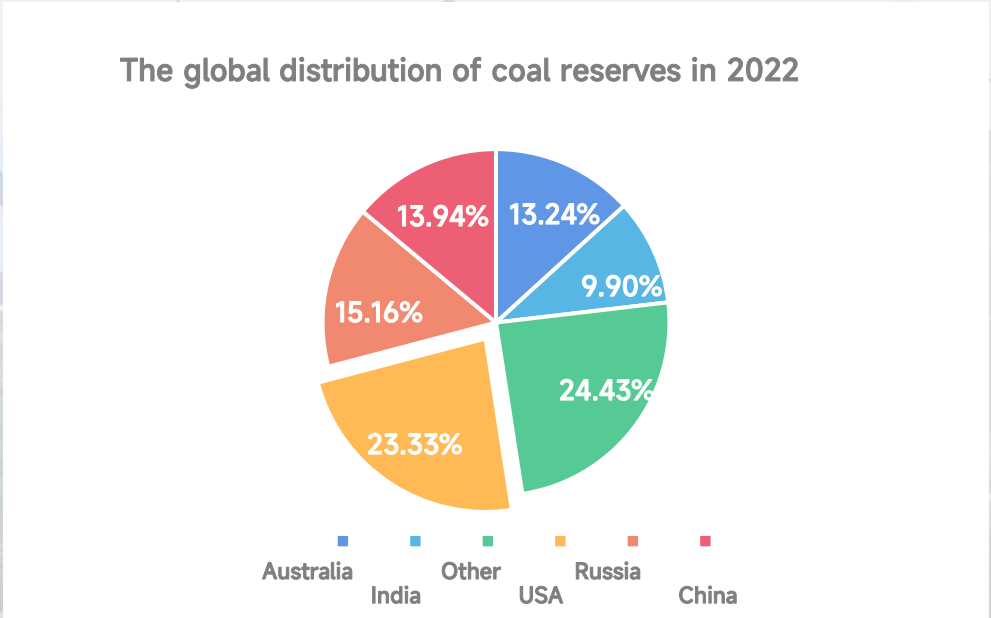
Petroleum industry

Electric power industry

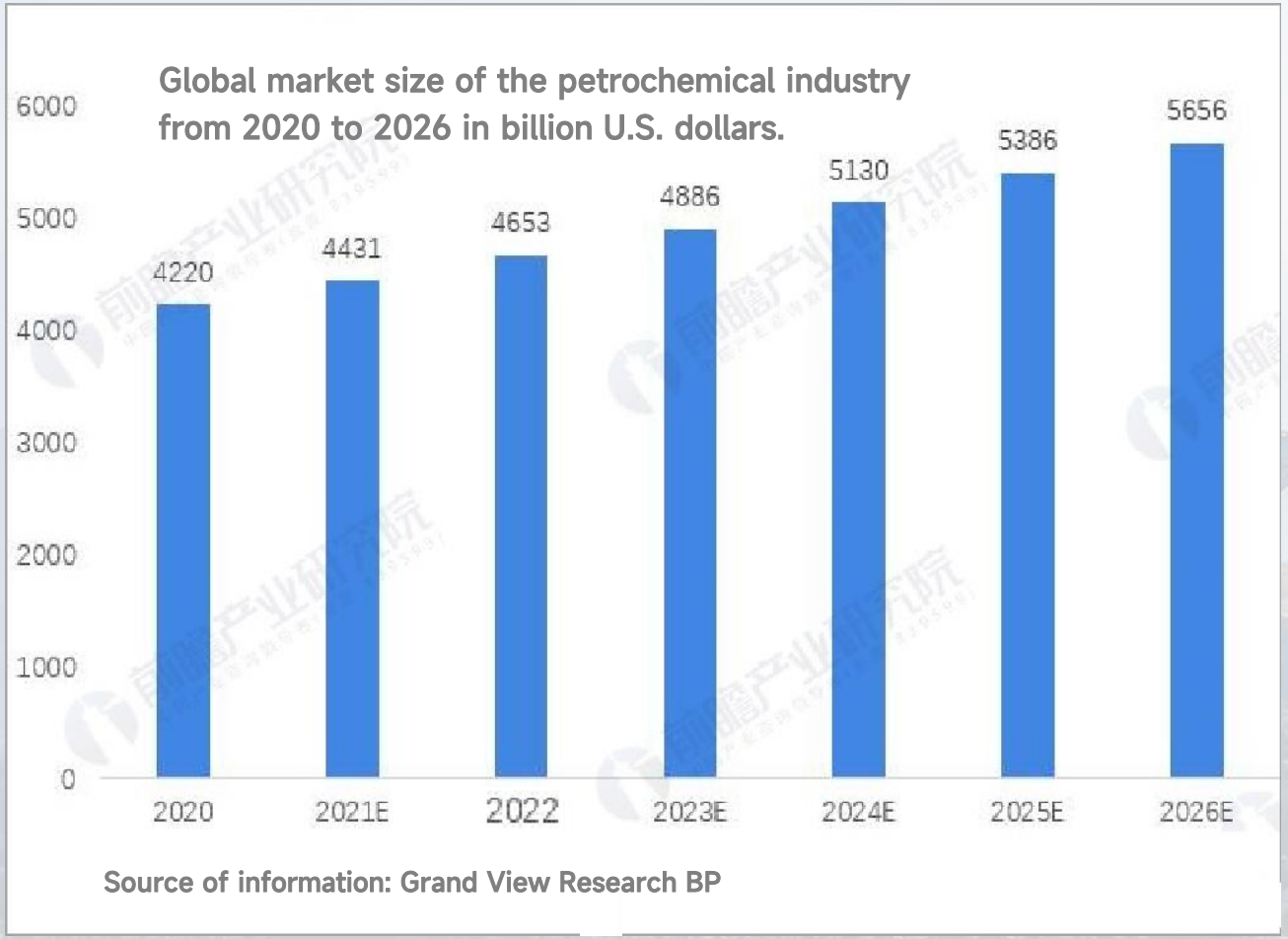
Coal Global distribution & production



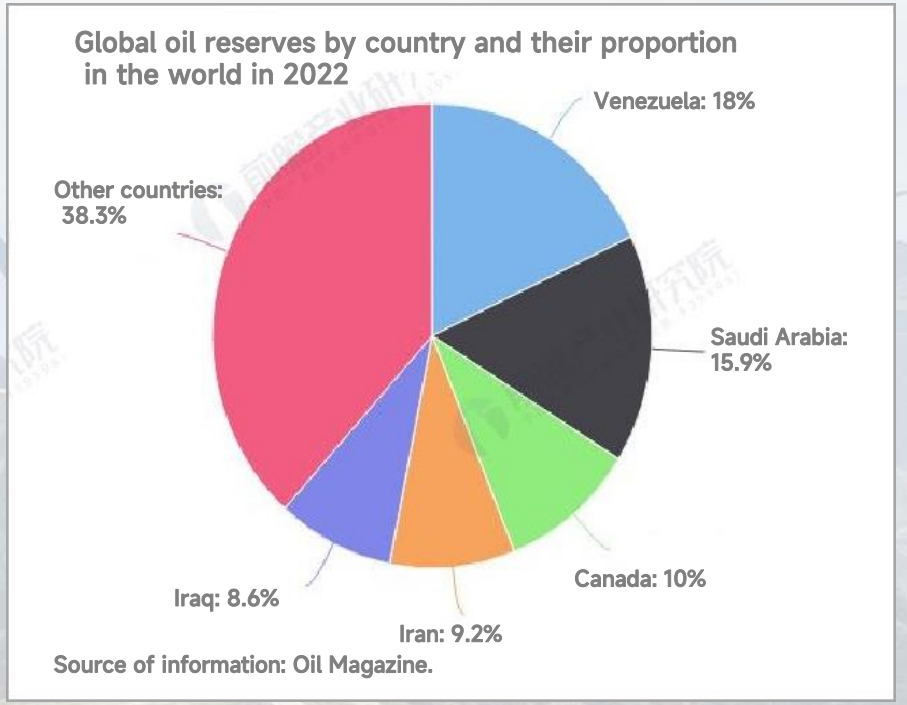
Coal is the most widely distributed fossil energy resource in the world, which can be divided into 4 categories: anthracite, bituminous coal, subbituminous coal, and lignite.



Petrochemical industry Global market size

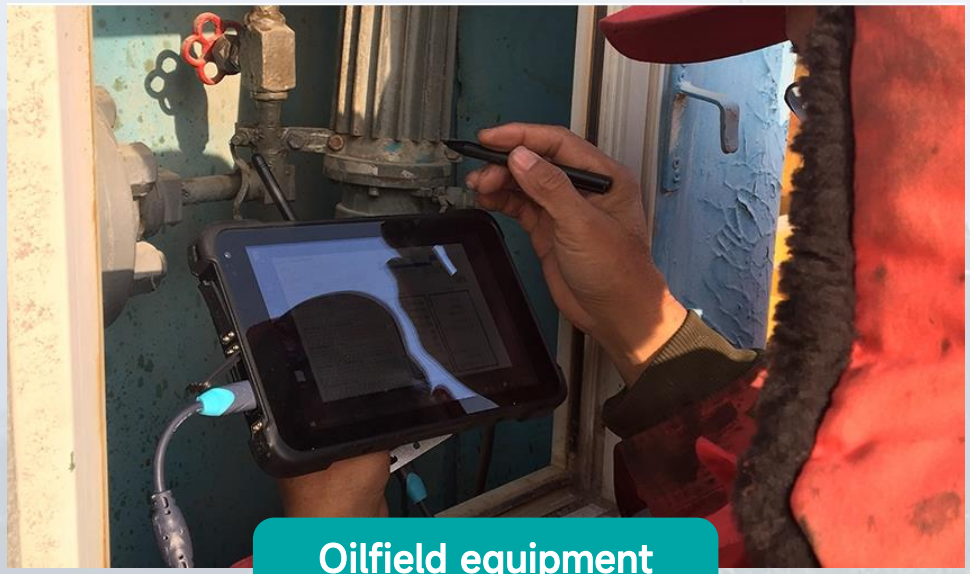


It is expected that from 2020 to 2030, the oil and gas industry in areas such as pipeline operation, refining, oil and gas field development, and drilling will enter the era of intelligentization one after another.

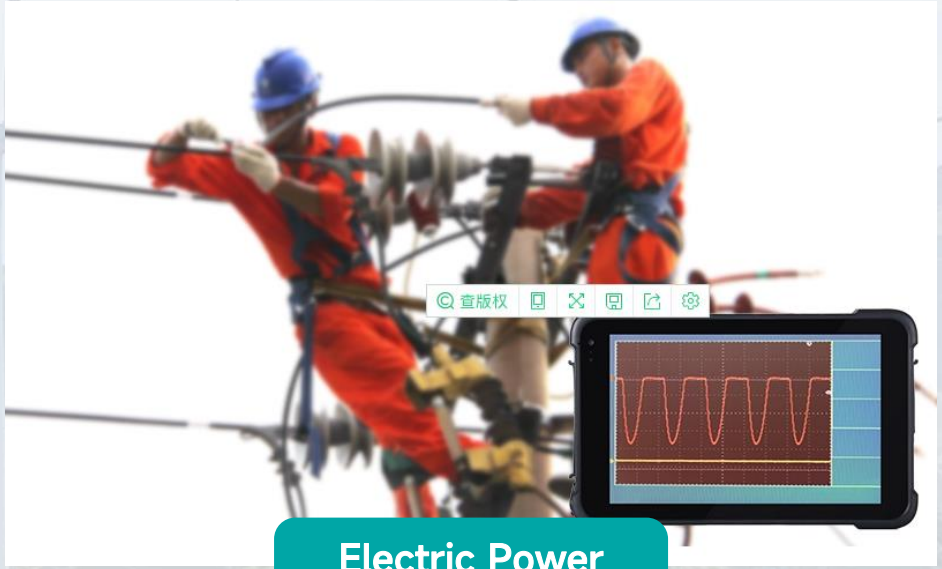


ONERugged & the energy industry

In the energy industry, it is necessary to achieve energy exploration and data analysis in complex geographic and climatic environments. Equipment, in addition to having strong reinforcement attributes, must also have anti-dust, waterproof, fall-proof, high and low temperature resistance, and be able to operate safely and smoothly in a variety of natural environments such as deserts, high temperatures, local climates, oil fields, etc. Onerugged products help the digital transformation of the energy industry.



Oilfield equipment Inspection



Electric Power Inspection

The Petroleum industry Solution

Oilfield equipment Inspection

Petroleum pipelines Inspection

Oilfield equipment Inspection Problems

Second upload

Manually record inspection data and upload it into the system for a second time.

Missed inspection

Potential hazards exist when inspection personnel fail to perform their duties properly, miss any inspections, or do not conduct inspections according to the due schedule

Inability to track in real-time

It's hardly to track the status of inspectors and equipment in real-time.

Oilfield equipment Inspection: Recommended model M80J

- Intel N5100 Processor
- 8 inch IPS 1000nits
- IP65 Protective Level
- Windows 10/11
- Rich interface expansion
- 3-year warranty

Rugged Mobile PC

- 2D Barcode Scanner
- GPS/GLONASS /Beidou/Galileo
- Dual band WIFI/BT5.0 /Support 4G
- 5000 mAh 8 Hours

Convenient and eco-friendly

Using rugged tablets to collect inspection data of oilfield equipment, achieving a fully paperless inspection process.

Early warning

Implementing systematic management to prevent missed inspections, and in the event of missed inspections, the inspection equipment will immediately trigger an alarm to remind both the inspectors and management personnel.

Full-process visibility

The location information of the inspectors, equipment malfunctions, and the status of the equipment can all be transmitted back to the system via wireless networks, enabling management to understand the precise whereabouts of the inspectors at any time, as well as analyze the operation of the equipment.

Petroleum pipelines Inspection Problems

Manual input

Inspection data needs to be manually input into the backend.

Missed inspection

Manual recording of inspection data increases the risk of missed inspections and other issues.

Insufficient configuration

The hardware configuration of the equipment is insufficient, making it incapable of running software for the petroleum industry.

Equipment service life is not long

The equipment is not waterproof, prone to damage from falls and dust, and it's exposed to oil, shortening its lifespan.

Petroleum pipelines Inspection: Recommended model N14T

- 11th Gen Intel Processors
- 14 inch IPS 650/1000nits
- IP65 Protective Level
- Windows 10/11
- HDD storage expansion
- 3-year warranty

Rugged Notebook

- Rich interface expansion
- Fingerprint
- dual band WIFI
- Dual battery life

More time-saving

The high-speed Wifi and mobile network can ensure stable communication between on-site workers and experts, providing reliable support in case of abnormal situations where remote technical assistance is required.

More efficient

Rugged Notebook can replace paper documents to help investigators conduct on-site investigations, record and analyze data quickly and accurately.

More convenient

Equipped with a powerful processor, the reinforced laptop can run the most advanced predictive analytics software, allowing researchers to study existing data and predict unknown future trends, helping to identify and eliminate potential security risks.

More standard

Rugged Notebook that comply with MIL-STD 810G and IP65 standards are able to withstand extremely challenging field conditions, providing the durability necessary for operators to work with ease.

The Coal industry Solutions

Mining industry Inspection

Mining trucks
Intelligent mgmt.

Mining industry Inspection Problems

Complex environments

The equipment is unable to work properly in complex environments.

Data cannot be traced

Abnormal situations cannot be stored or traced.

Slow manual inspections

Manual inspections are slow and error-prone.

Hard to share information

Information cannot be shared, and data needs manual processing multiple times.

Mining industry Inspection: Recommended model M10J

- Intel N5100 Processor
- 10.1 inch IPS 1000nits
- IP65 Protective Level
- Windows 10/11
- Rich interface expansion
- 3-year warranty

Rugged Mobile PC

- 2D Barcode Scanner
- GPS/GLONASS /Beidou/Galileo
- Dual band WIFI/BT5.0 /Support 4G
- Long-lasting Battery life

More convenient

Using machines instead of manual labor for online data entry allows for faster speeds. By utilizing high-speed networks for data transmission, it is possible to shorten communication times and efficiently address security issues.

Smarter

Combining backend software to automatically aggregate and analyze data can generate statistical reports, graphical visualizations and other displays of information, assisting management personnel in quickly understanding the situation and developing effective work strategies.

Traceable

The equipment has the ability to take photographs and archives of abnormal situations and violations, providing reference for the traceability of safety supervision responsibilities.

Highly reliable

The equipment is certified with MIL-STD-810H and IP65 waterproof and dustproof ratings, allowing it to operate in extreme temperatures ranging from -10°C to 55°C and handle the dangerous high pressure working conditions found underground.

The power industry Solutions

Power stations Management

Cable facilities Inspection

Electricity meter reading

Asset Management

Power stations Management Problems

Errors are common

Manual inventory cannot cover everything and is prone to errors.

Workload increases

With the increase of equipment and base stations, the workload of maintenance personnel has sharply increased.

Difficult to get up quickly

Due to unclear equipment and locations, new employees cannot get up to speed quickly.

Real-time data cannot be obtained

Management personnel cannot obtain real-time information on equipment location and usage status.

Power station management: Recommended model M20A

- 12th Gen Intel Processors
- 12.2 inch IPS 650nits
- IP65 Protective Level
- Windows 11
- 16GB RAM 128GB SSD
- 3-year warranty

Rugged Mobile PC

- Rich interface expansion
- GPS/GLONASS /Beidou/Galileo
- dual band WIFI
- Dual battery life

Barcode recognition

Using barcode technology instead of manual collection and storage of base station equipment information, the efficiency is high and the error rate is low.

Seamless connectivity

Real-time detection and feedback of communication base station and communication line faults in mobile networks allow management personnel to obtain fault information and carry out fault handling in the first time, greatly improving the efficiency and control level of base station and line fault handling.

Accurate understanding

Automatic collection of asset label information can accurately grasp the use of assets, from warehousing, allocation, maintenance to scrapping, the entire lifecycle is clear at a glance.

Time and labor saving

GPS can accurately locate maintenance personnel positions, which is convenient for management personnel to control in real time. At the same time, based on the position of the repair equipment, the optimal route can be planned, which saves time.

Electricity meter reading Problems

Low efficiency

Manual meter reading is inefficient, labor-intensive, and prone to errors.

Second upload

Meter reading data needs to be manually entered twice, and corresponding forms need to be created.

Prone to errors

Meter reading routes are complicated and easy to get lost or take detours due to unfamiliarity with the route.

Electricity meter reading: Recommended model H60T.

- Octa-core ARM processor
- Android 12
- 5.99 inch IPS
- IP65 Protective Level
- 3-year warranty

- Dual-SIM 5G
- 2D Barcode Scanner
- Support NFC
- dual band WIFI
- GPS/GLONASS /Beidou/Galileo

Rugged Handheld

More time-efficient

It can accelerate the speed of data collection, shorten the time required for meter reading, and reduce manual labor costs for meter readers.

More efficient

By utilizing the device's wireless network for data transmission and updates, manual double-entry processes are eliminated. The backend system directly consolidates, summarizes, bills, and collects the received data, significantly accelerating the efficiency of the overall business process

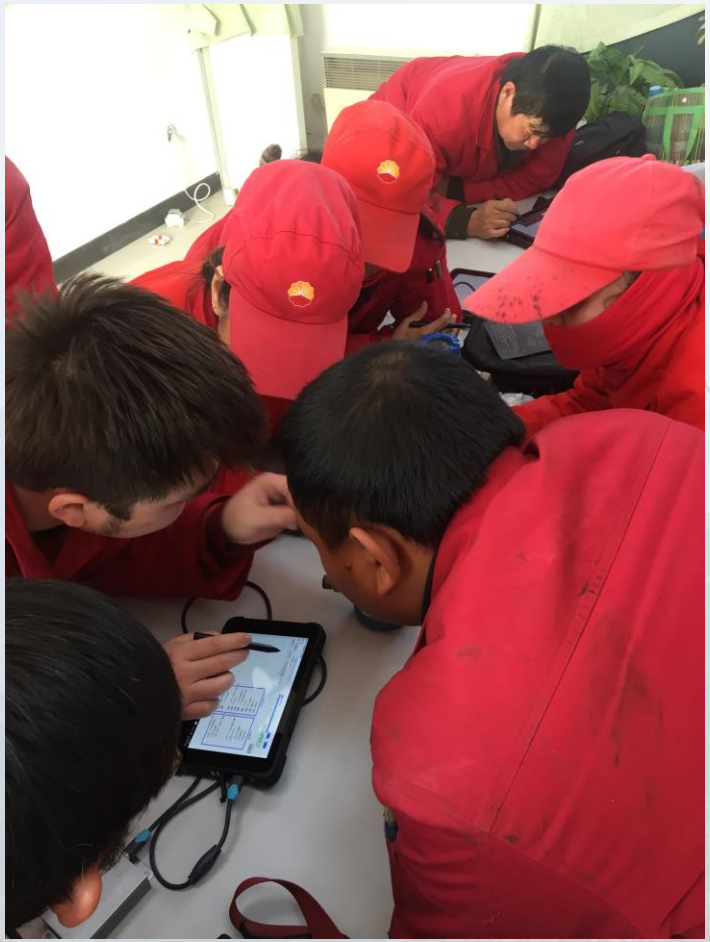
More convenient

The built-in GPS system in the device enables dynamic location tracking of meter readers, allowing for the recommendation of the most efficient work paths, resulting in significant time savings and overall convenience.

More standardized

A more standardized meter reading process not only reduces the workload of meter readers, but also greatly improves customer satisfaction

Customer Real Case 1



In Xinjiang, employees of PetroChina use OneRugged products to test oil wells and pipelines.

Customer Real Case 2

In Xinjiang, employees of PetroChina install OneRugged on trucks for oil exploration and management.

Customer Real Case 3

African oil exploration project

Slovakia power station management

Product Gallery

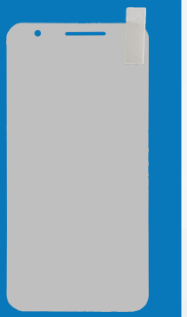
Product Accessories

Docking charger

Mount holder

Detachable battery

Hand-strap



Tempered film

Car Charge

Functional adapter

Carry handle

Stylus

Vehicle mount

Adapter


Empower digital technology
to enter a new phase
in the energy industry

THINCKIN 森克

Improvie informatization and
establish new standards

THANKS FOR WATCHING